

# Snowmass Agora #2 Circular e<sup>+</sup>e<sup>-</sup> Colliders

January 19, 2022

## Welcome to the Second Snowmass Agora!

 Organized jointly by the Snowmass Accelerator and Energy Frontiers and Fermilab Future Colliders initiative.

https://indico.fnal.gov/event/52534

Accelerator Agora Events (~ once a month, 3-5 pm Wednesdays)

Today →

Linear e+e- Colliders

Circular e+e- Colliders

Muon Colliders

pp and ep Colliders

Advanced Colliders

December 15, 2021

January 19, 2022

February 16, 2022

March 16, 2022

April 13, 2022

## **Program Committee**

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Future Colliders
Initiative



Pushpa Bhat



Joel Butler

## **Moderators of the Agora today January 19, 2022**



Sarah Eno (University of Maryland)



John Seeman (SLAC)

You will have an opportunity to ask questions during the session.

## Today's Agenda

Wed 19/01 므 Print PDF Full screen Detailed view Filter 15:00 TBD, Sarah Eno, John Seeman **Welcome & Introduction** 15:00 - 15:05 Alain Blondel Physics at Circular e+e- Colliders 15:05 - 15:20 Frank Zimmermann **Future Circular Collider (FCC-ee)** 15:20 - 15:35 Circular electron-positron Collider (CepC) Jie Gao 15:35 - 15:50 Eliana Gianfelice Small Circular Colliders (LEP3, FNAL Site Filler) 16:00 15:50 - 16:05 ERL-based e+e- colliders Vladimir Litvinenko 16:05 - 16:20 **Q&A** and Moderated Discussion John Seeman, Sarah Eno 16:20 - 17:00 17:00 **Informal Post-Agora Chat** 17:00 - 17:30

## Alain Bondel: Physics at Circular e+e- Colliders



Alain Blondel is one of the instigators of the EW scale e+e- circular colliders since 2011.

Main achievements rewarded with international prizes:

- -- 90's LEP precision measurements (Number of neutrinos, Z mass etc.),
- -- 2000's Initiator and "spokesmouse" of the MICE experiment
- -- 2010's T2K and neutrino oscillations.

#### Frank Zimmermann: Future Circular e+e- Collider (FCC-ee)



Frank Zimmermann is a senior scientist at CERN, and the deputy leader of the Future Circular Collider (FCC) study.

He also is the Editor of the APS journal PRAB, and this year he serves as the Chair of the APS Division of Physics of Beams (DPB).

In the past he worked on several operating colliders, including HERA, SLC, PEP-II, KEKB, Tevatron, and LHC.

## Jie Gao: Circular Electron-Positron Collider (CEPC)



Prof. Jie Gao is a professor at the Institute of High Energy Physics, CAS, China, CEPC IB Vice Chair, CEPC Accelerator Convener, CERN MAC member, former ICFA LCB member

#### Eliana Gianfelice-Wendt: Small Circular Colliders (LEP3, FNAL site Filler)



Eliana Gianfelice-Wendt is a senior scientist at Fermilab where she works on beam optics and dynamics. She collaborates with the FCC and EIC teams on the lepton beam polarization.

Before, Eliana worked at DESY (Germany) contributing to the success of HERA e<sub>±</sub> beam polarization program. She started her activities in the field of accelerator physics as a CERN Fellow and afterwards as a INFN staff member.

#### Vladimir Litvinenko: ERL-based e+e- colliders



Vladimir Litvinenko is Professor of Physics at Stony Brook University and Director of Center for Accelerator Sciences and Education with joint appointment at BNL. His interested extend from colliders and hadron beam cooling to FELs and gamma-ray sources.

#### Code of Conduct for this meeting:

Please be advised that you are required to comply with the APS code of Conduct for meetings, DPF Core Principles and Community Guidelines and Fermilab Statement of Community Standards.

– https://indico.fnal.gov/event/52534

#### Recording of the session:

Please note that we are recording the whole session. The video recording will be made available on the web site later.

#### Q&A session:

Please stay muted until you raise your hand and are called upon.

The moderators will alternate between real time and submitted questions.